

PATENT

Atty. Dkt. WEAT/0142.D2
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We claim:

1. A kelly bushing, comprising:
 - a base with a tubular channel therethrough from top to bottom, the base having a plurality of base axle slots,
 - a roller support on the base, the roller support with a plurality of roller support axle slots,
 - each axle with a portion movably positioned in a corresponding roller support axle slot of the roller support so that movement of an axle there moves its corresponding roller with respect to the tubular channel,
 - each axle with a portion movably positioned in a corresponding base axle slots of the base so that movement of an axle therein moves its corresponding roller with respect to the tubular channel,
 - a leveling bar at the top of the roller support, the roller support movable vertically by moving the leveling bar, and
 - the base axle slots at an angle to the roller support axle slots so that movement of the leveling bar effects movement of the base axle slots with respect to the roller support thereby moving the rollers with respect to the tubular channel into and out of contact with a kelly within the tubular channel.
2. The kelly bushing of claim 1, further comprising:
 - a plurality of spaced-apart guide rods extending upwardly from the base and through opening s in the leveling bar to guide movement of the leveling bar with respect to the base thereby guiding movement of the rollers.
3. A kelly bushing, comprising:
 - a body with a tubular channel therethrough from top to bottom, and
 - a plurality of rollers connected to the body and spaced-apart around the bottom of the body, each roller with a portion projecting into the tubular channel for contacting flats of a kelly projecting through the body.
4. The kelly bushing of claim 3, wherein the kelly bushing is positionable on a rig floor with the rollers beneath the rig floor.

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5. A kelly bushing, comprising:

a body, the body having an opening therethrough for the passage of tubulars through the kelly bushing,

roller apparatus connected to the body for facilitating tubular movement through the body, and

the opening sufficiently large so that a kelly, tool joints and drill pipe are movable therethrough, the kelly having a hex part and a tool joint part.

6. A kelly bushing, comprising:

a body with a tubular channel therethrough from top to bottom,

a plurality of rollers connected to the body and spaced-apart around the body, each roller with a portion projecting into the tubular channel for contacting flats of parts of a kelly projecting through the body, and

the body comprising two selectively separable halves releasably joined together.

7. A kelly, comprising:

a tubular body with a top and bottom, and

a flats tubular with a top and a bottom, the top of the body formed of or secured to the bottom of the flats tubular, the flats portion having a plurality of flat surfaces around circumference of the flats tubular,

at least one tool joint having a top and a bottom, the top of the at least one tool joint connected to the bottom of the tubular body, the tool joint having an outer diameter, and

a diameter of the flats across a cross-section of the flats tubular from one flat surface to an opposing flat surface at least as large as the outer diameter of the at least one tool joint.

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8. A kelly, comprising:
 - a tubular body with a top and a bottom,
 - a flats tubular with a top and a bottom, the top of the body formed of or secured to the bottom of the flats tubular, the flats portion having a plurality of flat surfaces around a circumference of the flats tubular,
 - a tool joint having a top and a bottom, the top of the tool joint connected to the bottom of the tubular body, and
 - the tubular body between about five feet and about ten feet in length.
9. The kelly of claim 8, wherein the tubular body is about six feet long.